

The Framingham Circuit

Newsletter of the Framingham Amateur Radio Association, March 23, 2025 Vol. 92, No. 1

President's Message: Now that spring is here, you have only a few weeks before the leaves grow in around your wire antenna ropes. This is the time to make any adjustments while you can still see the bare branches. I ordered and tried out a tree throw bag, repositioned the ends of my Cobra UltraLite Senior dipole. Then I realized I could also raise the middle to a nearby tree, forming a slightly tilted inverted V. The ends go from north to south, favoring east and west off the sides. Overall, it seems in a much better postion than previously. We will soon see if it works better. What changes are you planning to your antennas?

We had three interesting meetings (one with videos and two with presentations) and one luncheon, and are looking forward to two more presentations, Nearfest, the NEQP, FARA nominations and elections, and Field Day planning.

In this issue we have submissions by Sumner Weisman, W1VIV; Steve Hewlett, W1NIV; Steve Kondo, K1STK; Jonathan Slawsby, W5GI; and Pete Hart, WA1LWC. Thanks for these items and as always please send me material for future Circuits. Thanks to Steve, W1NIV, for editing assistance.

Club activities since last Circuit.

- January 2, 2025: FARA Meeting.
 - o <u>Batteries for Portable Operations</u> video suggested by Steve N1MH.
 - o <u>C5I Bijol islands dxpedition</u> video, suggested by Dave, K1HT.
 - We had a show and tell session.
- January 11, 2025: Lunch at Longhorn off rt. 20 in Marlborough. Members and guests invited. See photo.
- February 6, 2025: FARA Meeting. Sumner Weisman, W1VIV, presented "Repair Your Radio Without Understanding Electronics? Sometimes You Can!"
- March 6, 2025: FARA Meeting. Charles Rousseau, W1ZOP, presented on "Air Force Mars Radio"

Upcoming meetings and activities:

- April 3, 2025: FARA Meeting: Nels Anderson, K1UR, will present "Ham Radio Pickers."
- May 1, 2025: FARA Meeting.
 - o Max Kendall, W0MXX, will talk about "StratoScience: Amateur Radio and Youth Education to New Heights."
 - o Also officer nominations.
- May 2-3, 2025; Nearfest XXXVII. https://winterfieldday.org/
- May 3-4, 2025: New England QSO Party
- June 5, 2025: FARA Meeting.
 - o Officer elections.
 - o Field Day planning.
- June 28-29, 2025: ARRL Field Day
- August 21-24, 2025 HamXposition https://hamxposition.org/
- September 4, 2025: DMR Update 2025 by Dom Mallozzi, N1DM

Julius "Julie" Hoffer, W1DL (SK)

By Sumner Weisman, W1VIV

I thought it would be interesting and instructive for current FARA members to learn something about a few of the key FARA people from the past. A number of old members come to mind, and I may write about them in the future, but Julie, W1DL, was a very important and much needed member of our radio club. Let me explain:

Julie, assisted by his wife Sylvia, was a ham radio flea market vendor. Every year they would load up their car with all sorts of radio parts, and they would stop at every hamfest from New Hampshire to all the way to Florida! The reason that Julie was so popular in the club was that any member could phone him when looking for an obscure radio part, and chances were very good that he would not only have the part, but generally he also would give club members a break on the cost. Julie was simply a very nice person, and quite knowledgeable about solving ham radio problems for club members.

Julie was an officer in the U.S. Air Force. He enlisted in WW2, and again in the Korean War. He operated from the Philippines in 1946. He also operated Air Force MARS station AF8UFH in 1949. He eventually left the Air Force, and he and Sylvia moved to Framingham. They had two daughters, and to this day I cordially keep in touch with both of them. According to one of his daughters, he ranked first in his class at the Air Force radio school, and took over teaching classes when stationed at Yale University because he knew more than the teachers did. Of course – he was a ham!

Julie came from Detroit. In his back yard, I recall his two-element wire 40 meter beam about 8 feet above the ground, consisting of a Director and a Driven Element, aimed to the west. A steep cliff in his back yard was exactly in the right place to become the Reflector, cleverly giving him a high gain 3-element 40 meter yagi antenna with a straight shot into Detroit to talk to his old friends. He was known as "Mr. 40 Meters." The main transceiver at W1DL in those days was a Ten-Tec, and Julie was very proud of it. Julie passed away in December 2003, at the age of 82. I have many pleasant personal memories of W1DL. Here are a few, in no particular order.

- After Sylvia was gone, Julie continued his driving trips up and down the east coast, selling radio parts. I would help him remove the back seat from his big Cadillac, and load it with boxes and boxes of parts.
- At one time I worked for Raytheon Corporation, which owned a tower at the top of Nobscot Mountain in Framingham. My boss (also a ham) and I got permission to use their little piece of land for an upcoming ARRL Field Day, and we invited Julie to join us. It was a very enjoyable and successful time, and the three of us racked up an amazingly high score for Eastern MA and for New England. We never did it again.
- Julie volunteered to take the night shift at FARA Field Days, when everyone else was sleeping, and he would greatly raise the club's total score as an excellent CW operator.
- Julie used to manufacture and sell antennas such as the G5RV and various 80 through 10 meter dipoles. He would package them quite professionally in plastic bags, complete with instructions. I still remember his hand-cranked wire measuring device with large spools, to speed up wire and coax length measurements.
- At one time I wanted to install a horizontal 40 meter full wave loop antenna in the pine trees behind my house. I bought a roll of copper wire from Julie, and invited him to my back yard to watch me put it up in in the trees with my trusty slingshot. I was able to raise the 4 corners of the antenna to about 50 feet. That antenna lasted for over 30 years until long after Julie died.
- When Julie passed away, his daughters asked me to help sell much of his parts collection. I sold many ferrite and powdered iron rods, toroids, and snap-on ferrites for probably a couple of years, mostly on ebay.

I'm sure that there are other FARA old-timers who remember W1DL. Julie, we miss you.



Figure 1. Julie at Field Day. In the rear you can see Bob Hess, former FARA President, and Robert Hess, former FARA newsletter editor.



Figure 2. Julie at an early station.



Figure 3. A W1DL vintage station, showing a Collins 75A1 receiver, an E.F. Johnson Viking ll transmitter and E.F. Johnson balanced antenna tuner.

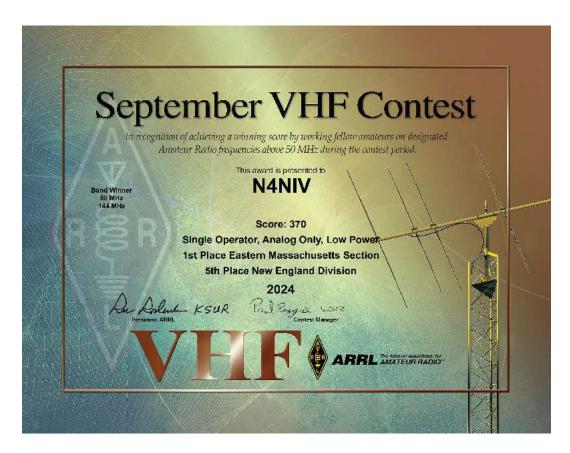


Figure 4 above: Steve Hewlett, W1NIV, sent in this award from the September VHF contest that he wrote about in the December 2024 Circuit (note N4NIV was his previous call sign)



Figure 5 above: Weaver 12 oz. arborists throw weight and line kit \$28.99 (KB1VXY)

Winlink by way of HT and Mobilinkd TNC4

by Steve Kondo, K1STK

I have been playing with Winlink and recently built an adapter cable to hook up my Icom ID-5100 to my Mobilinkd TNC4. Taking advantage of the W1STR-3 digipeater I'm able to have my Winlink messages relayed to the W1SHS-10 Radio Mail Station. Until now I have only reached VHF packet stations with the Mobilinkd TNC4 and my HTs, but I thought it would be a good project to equip my Icom ID-5100 radio in my shack with the same capability.

The Mobilinkd TNC4 is described as a "Bluetooth APRS TNC" however its uses extend beyond APRS (Automatic Packet Reporting System). One common application is sending and receiving Winlink e-mail via VHF or UHF. The device can be paired with your iOS or Android device or your computer via Bluetooth adding a KISS TNC to most radios with the proper interconnect between the Mobilinkd TNC4 and your transceiver. Adapter cables for common HTs are available from Mobilinkd, but making your own cables is straightforward.



Figure 6 above: Mobilinkd TNC4 on bottom, Yaesu HT interface cable top left, Icom HT interface cable top right.

Mobilinkd uses a 3.5mm TRRS (Tip, Ring, Ring, Sleeve) connector on the TNC4 to interact with the radio using the following pinout:

- Tip: Speaker (audio input to TNC)
- Ring 1: PTT (Simplex PTT mode)
- Ring 2: Mic (and PTT in Multiplexed PTT mode audio output from TNC)
- Sleeve: GND/Common

To interface the Icom ID-5100 I took advantage of the speaker jack on the back of the unit which would feed the "Speaker (audio input to TNC)" contact for the TNC. For PTT, Mic, and GND connections I used the RJ45 receptacle for the hand microphone.

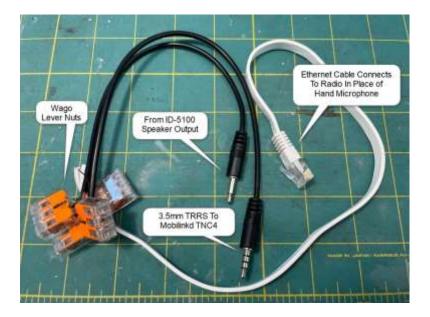


Figure 7 above: Prototype cable assembly to interface the Mobilinkd TNC4 to the Icom ID-5100

I cut an Ethernet cable in half and stripped the necessary leads, while the 3.5mm connectors were spares I had in the junk pile. I prefer to use Wago lever nuts when prototyping cable harnesses as they are fast to work with and allow for quick reconfiguration when mistakes are made in the wiring diagram. Only once the harness has been tested and functions properly do I solder, insulate, and strain relieve all electrical connections. Don't forget to label the harness with its intended purpose since many cable assemblies may look similar but have different wiring layouts.

I use the RadioMail app for iOS to compose e-emails, selecting the TNC hardware that will interact with my radio, and selecting destination Radio Mail Stations as well as any digipeaters that may be required to relay the packet to its destination.



Figure 8 above: RadioMail screen shot showing selected path.

This was a quick project to extend the usability of my Mobilinkd TNC4 beyond my HTs. I successfully tested sending and receiving Winlink e-mails via a digipeater a few miles to my north which repeated packets between my location in Natick with a station in Franklin, MA. Not only can I use my ID-5100 for Winlink I can also use it for APRS. My next steps are finalizing the cable assembly and testing my station's reach to additional Radio Mail Stations.

By Steve K1STK February 18, 2025 Additional Resources:

Mobilinkd TNC4 https://store.mobilinkd.com/products/mobilinkd-tnc4

Winlink https://winlink.org/
RadioMail App iOS https://radiomail.app/

Wago Lever Nuts https://www.wago.com/us/lp-221

EMA Packet Map http://www.n1xtb.net/ema_packet_map.html

Jonathan Slawsby, W5GI, writes: New equipment Figures 9-14 below



FTDX101D HermesLite 2 (SDR) ICom 705

Notes: Hermes-Lite: The Hermes-Lite is a low-cost direct down/up conversion software defined amateur radio HF transceiver based on a <u>broadband modem chip</u> and the <u>Hermes SDR project</u>. It is entirely open source and open hardware, including the tools used for design and fabrication files. Over 500 Hermes-Lite 2.0 units have been successfully built. http://hermeslite.com/



MY FIRST QSL CARD PRINTING

By Pete Hart WA1LWC

I have been an amateur radio operator since September 1969. I received my Novice license and was issued the call WN1LWC. This is how it all started.

I was a 13 year old kid delivering papers around town. I had noticed for a while that one of my customers had a tower and antenna reaching high in the sky behind their home. I was somewhat fascinated by this and found the courage to knock on the door to find out what it was for. A woman came to the door to see what I wanted. She always left the money for the paper in an envelope between the doors so it was unusual that I would be knocking. Come to find out, she and her husband were both hams (though I do not remember their calls). After a while I asked if one of them could help me get my license. For reasons that I do not recall, they could not BUT they directed me to someone who could. So:

My "Elmer" was a ham named Willard Cook, W1JFG, out of Hopedale, Massachusetts. He was a "big DX'er" who operated on 20, 15 and 10 meters. He used a Drake TR-4 and a Henry 2K3 amplifier with a six (yes six) element Telrex beam on 20, three elements on 15 and 4 elements on 10. All of this sat on a 50 or 60 foot windmill style tower! The on and off orange glow of the 3-500's in the 2K3 as he spoke kept (my brother and I) mesmerized. It seemed like something out of science fiction at the time! We just knew WE HAD TO GET ON THE AIR!!! He helped my 14 year old brother (WA1MDS, now) and I study for our Novice license and a few weeks later he subsequently administered the exam. Waiting for the ticket to arrive was the worst! In the meantime My father and Willard brought us up to meet Herb Gordan, W1IBY who sold ham radio equipment. We ended up with a Heathkit HR-10B receiver and a Knightkit T-60. A friend of Willards was also moving to Florida (W1DGM) and sold us his rohn foldover tower, TA-33, and rotator for \$75.00!! NICE!

So after a short while, my brother and I were able to get on the air and consequently ended up fighting over who was to get on the air and who had to wait! Not sure how we worked this out but we are both still alive..

So, to the point of the story:

After a while we started receiving QSL cards from around the globe and we had no way to reciprocate. We told Willard (W1JFG) of our dilemma and he knew of a ham in Framingham who, in fact, prints QSL cards. That contact was none other than Ray Stevens, W1FY. Ray had his own print shop and he subsequently made my brother and I 200 QSL cards each. They were of high quality and we were very happy with them.

So my main point in writing this to you is that it will give the members of FARA yet one more account of the origin of the club's call letters, W1FY.



Figures 15 and 16 above: Front and back photos of one of my remaining cards from Ray.

Regular Meetings: FARA regular **c**lub meetings are held on Zoom on the 1st Thursday of each month at 7:00 PM, and some meetings will also be hybrid, usually at the McAuliffe branch of the Framingham Library. We take July and August off. Always check the webpage first. Members will get an email invitation before the meeting. **Members should be sure that they opted in for email notifications and that their email on record is accurate!** Non-members may request an invitation from president@w1fy.org.

Club Nets:

- FARA Net: Sunday, 7:30PM, output frequency 147.15 / input frequency 147.75, **NOTE: PL** tone is now 100. Social/chat, emergency preparedness, amateur radio questions, Echolink enabled. W1FY-R
- FARA Net: Wednesday 7:30 pm, Informal Check-in Net: Echolink enabled, W1FY-R.
- Scanner listeners are invited to let us know you follow the nets by sending an email to contact@W1FY.org

Club Web Site: W1FY.org

Social Media:

• https://www.facebook.com/FARAW1FY/

Dues: Flat rate of \$20 per year per person or family, and no separate repeater fee. Paid members will be posted on the web page. You can join/renew/pay online at http://w1fy.org/membership-form

Testing: Exams on hold while city offices are unavailable.

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